

FIG. 1A

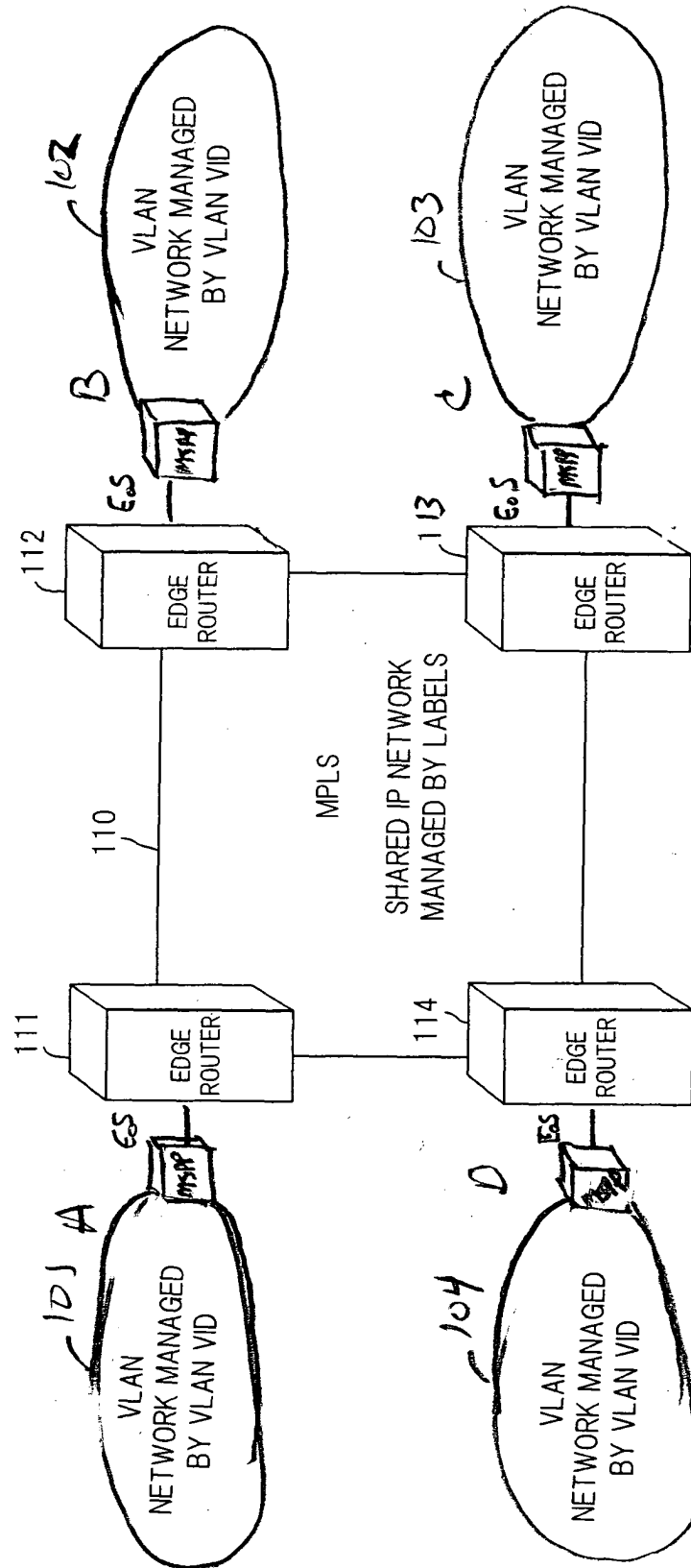


FIG 1B

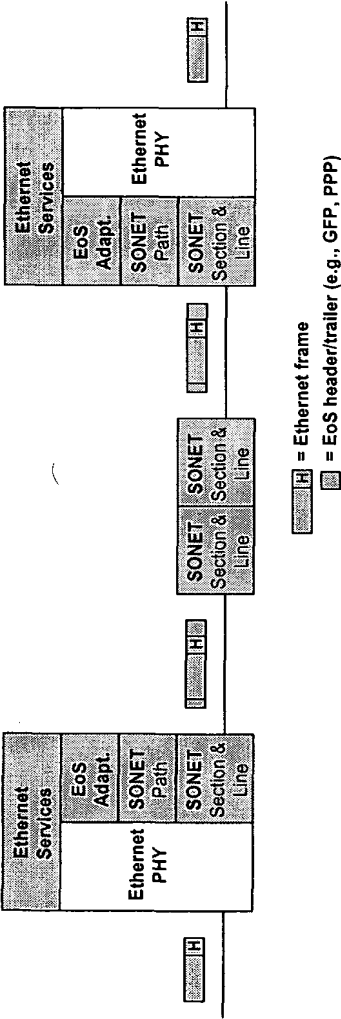


FIG. 2

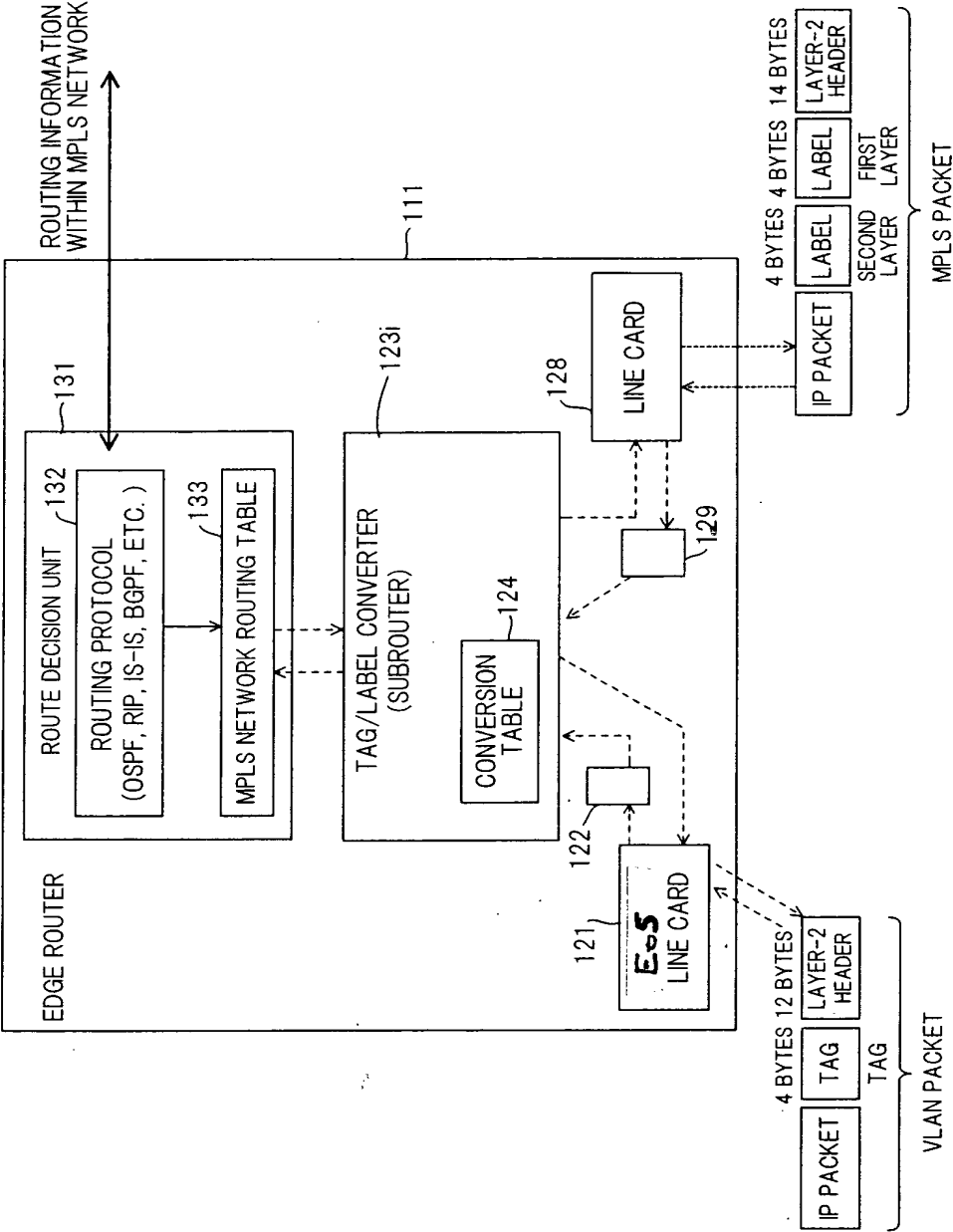


FIG. 3

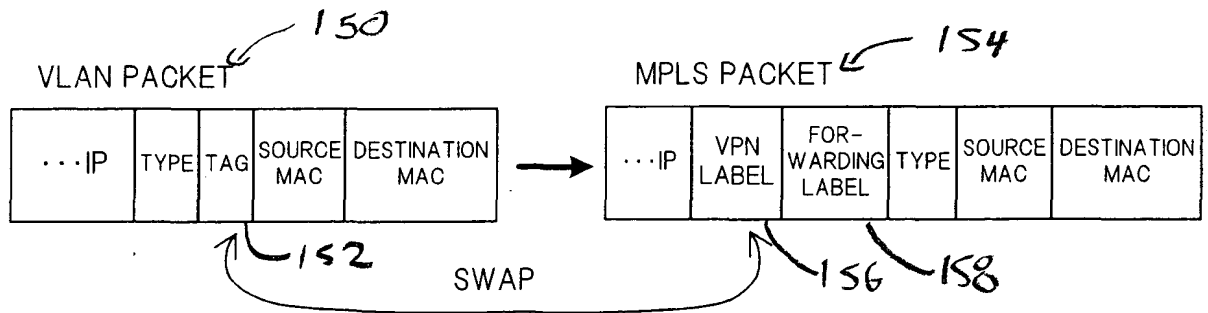


FIG. 4A

124

| VLAN ID(VID) | VPN LABEL |
|--------------|-----------|
| N            | M         |
| N+1          | M+1       |
| .            | .         |
| .            | .         |
| .            | .         |
| N'           | M'        |

FIG. 4B

| Output I/F | EoS I/F (Port) | EoS sub I/F (Channels) |
|------------|----------------|------------------------|
| EoS 0      | 1              | 1-6                    |
| EoS 1      | 1              | 7                      |
| EoS 2      | 2              | 1                      |
| .          | .              | .                      |
| .          | .              | .                      |
| .          | .              | .                      |
| EoS N      | .              | .                      |

FIG. 5

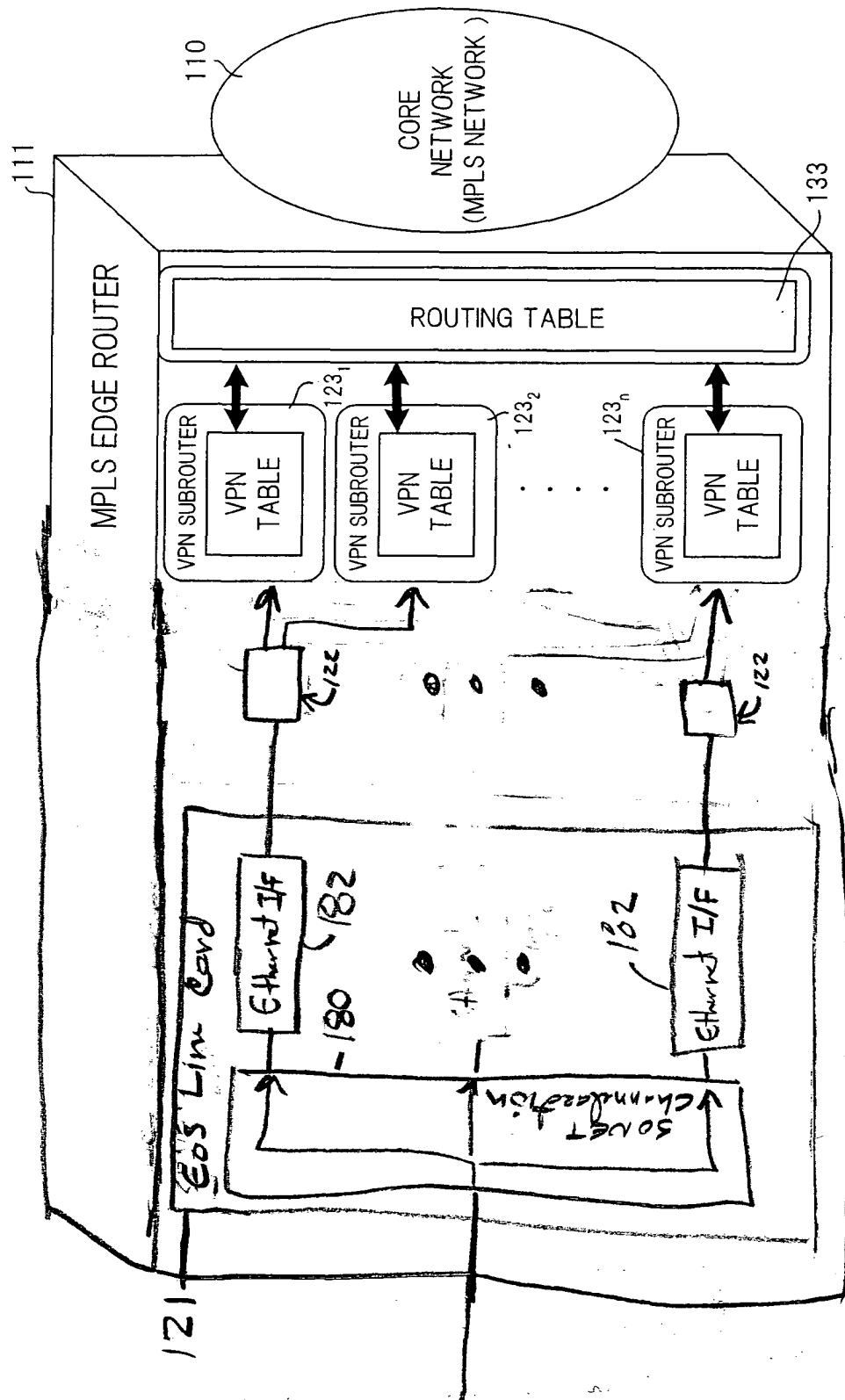


FIG. 6

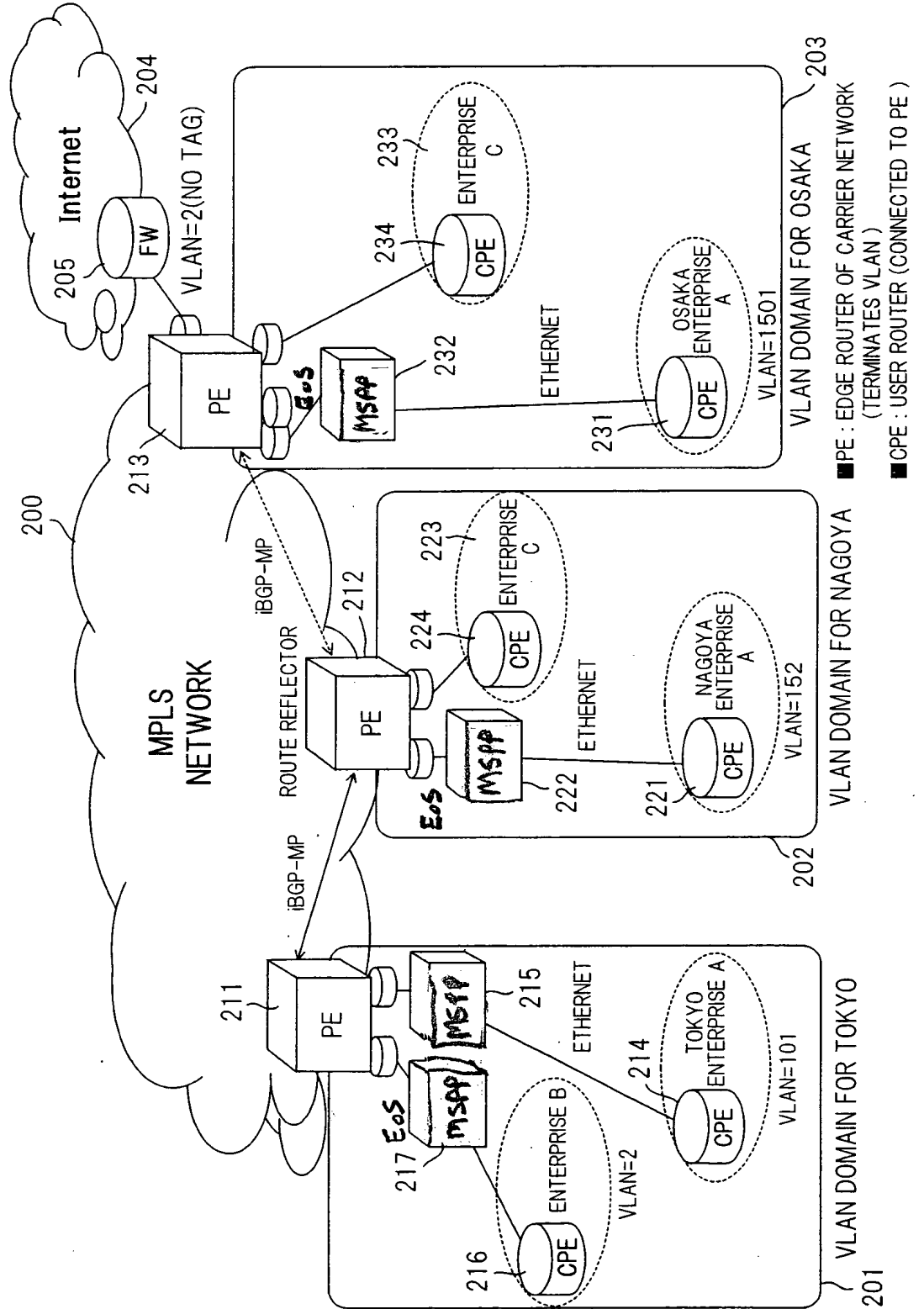


FIG. 7A

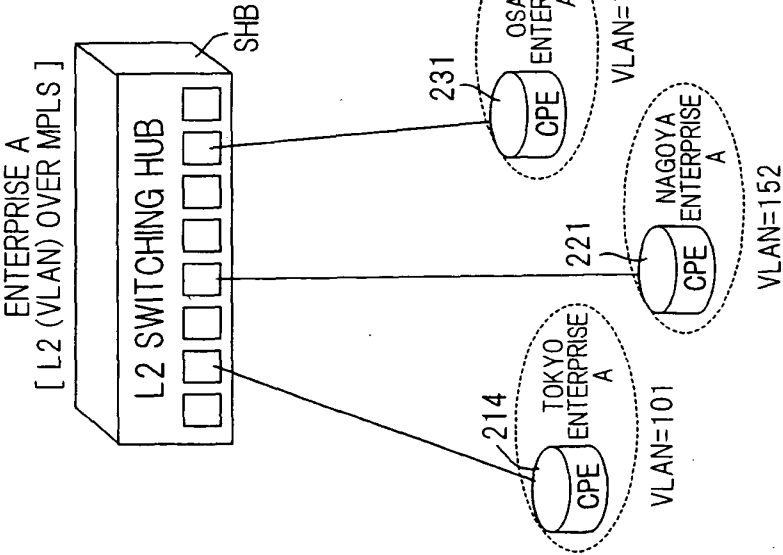


FIG. 7B

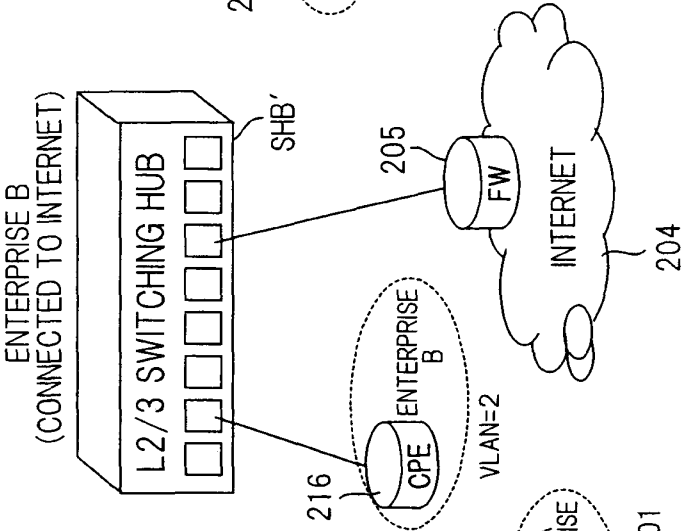


FIG. 7C

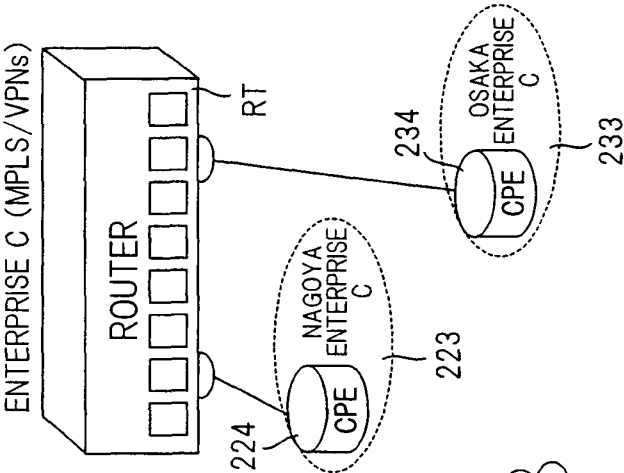


FIG. 8

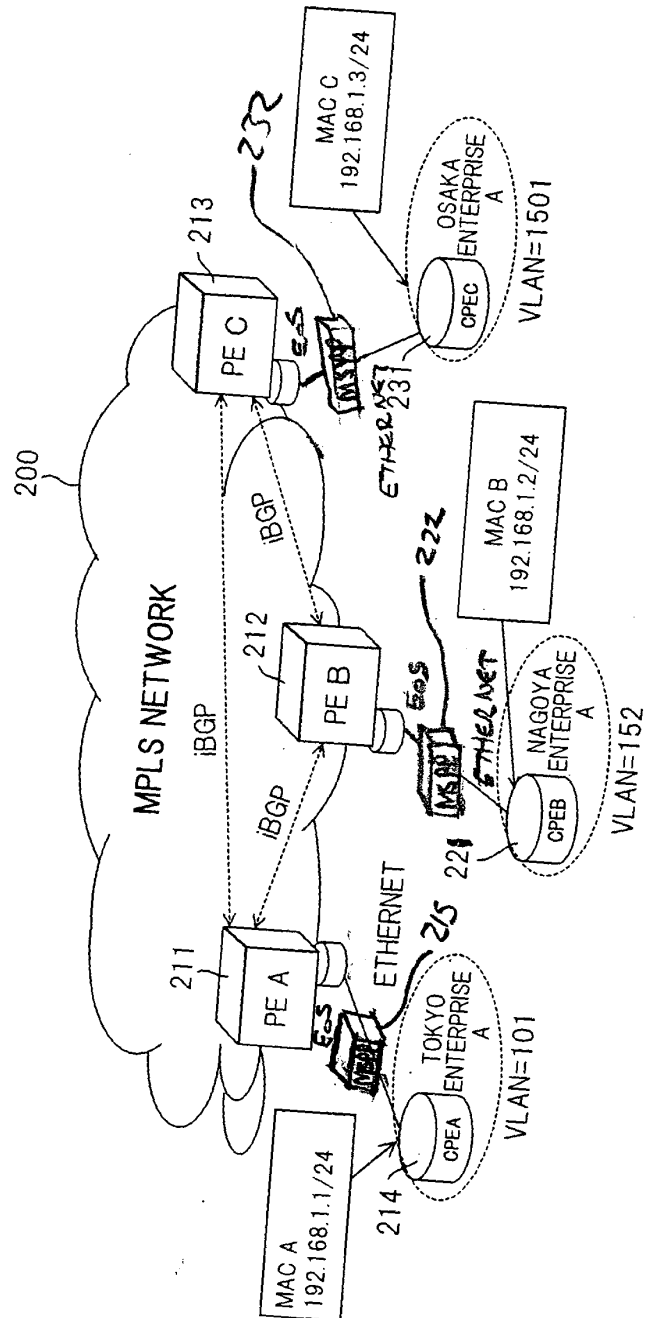
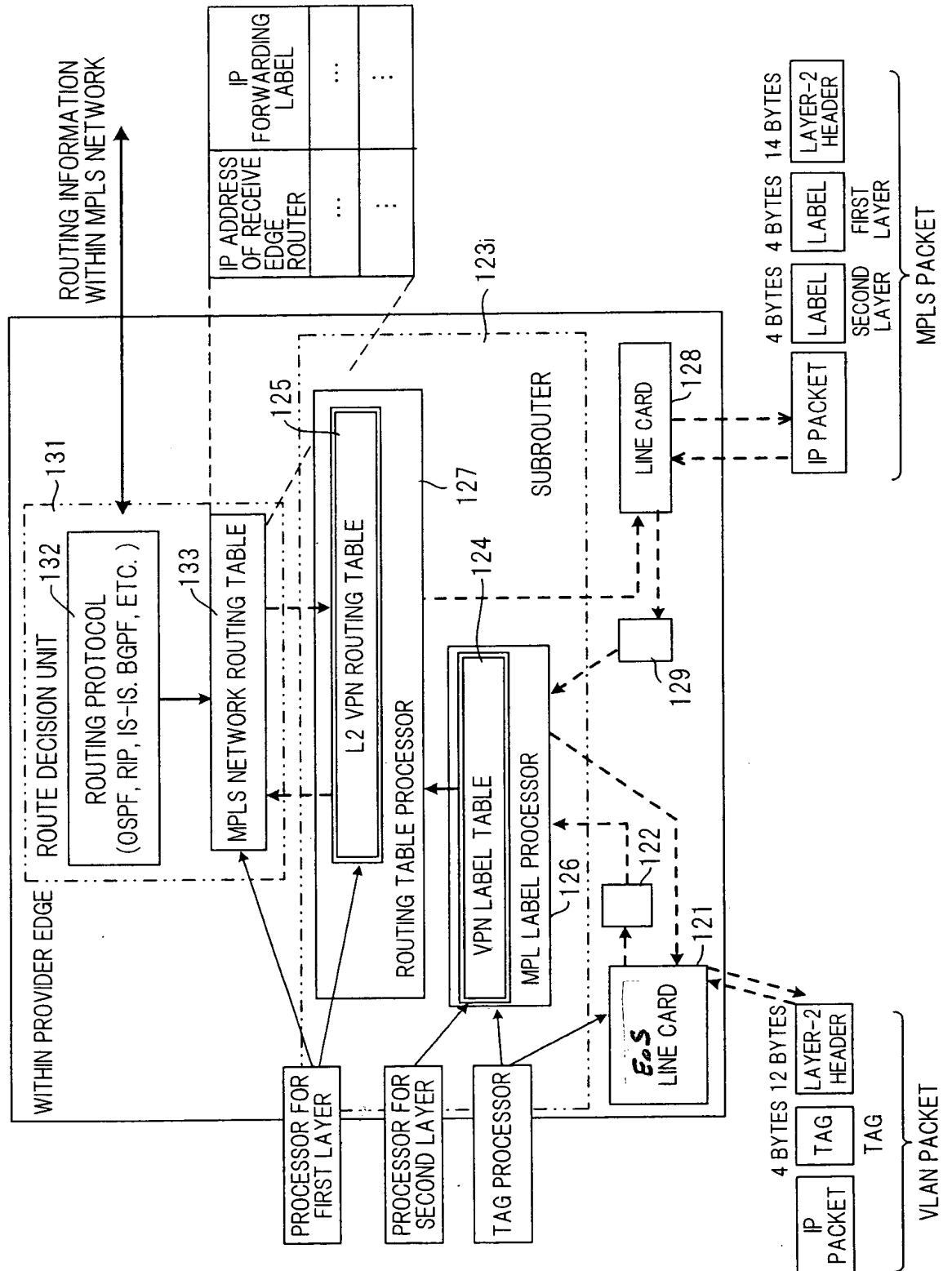
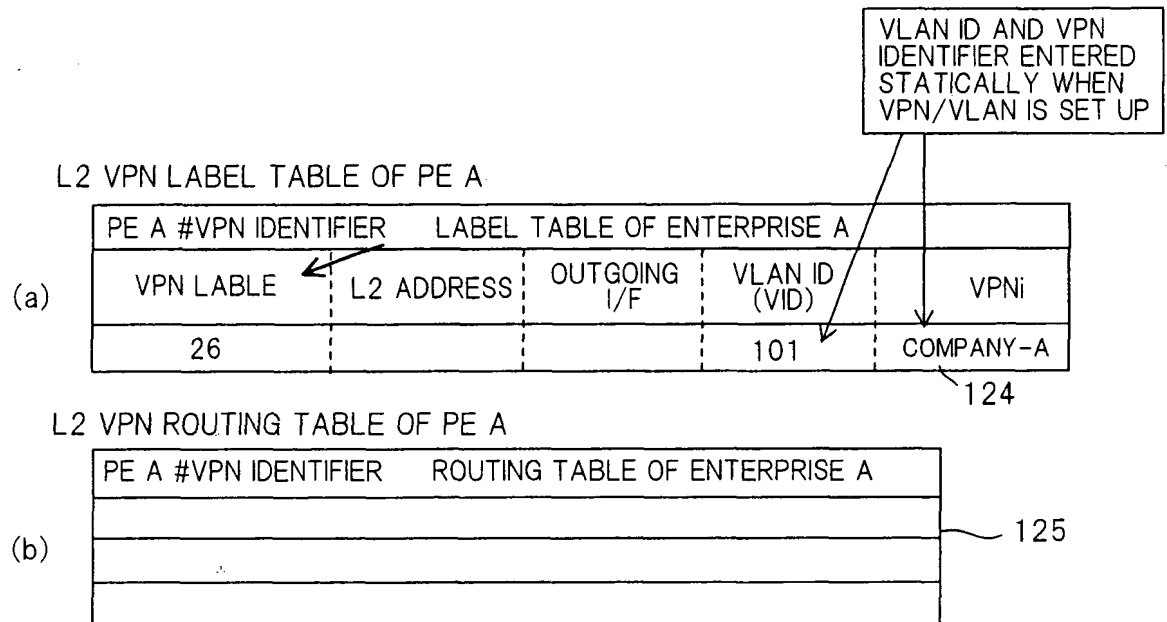




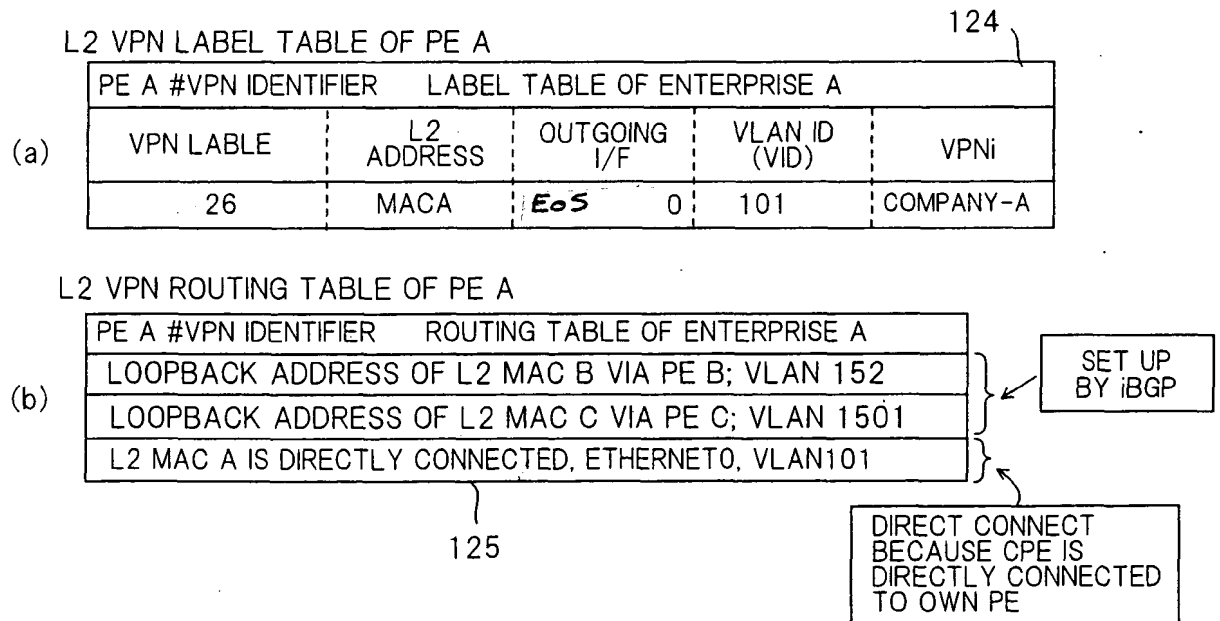
FIG. 9



**FIG. 10A**



**FIG. 10B**



## FIG. 11A

VPN TABLE OF ENTERPRISE A IN PE A

| L2 VPN LABEL TABLE OF ENTERPRISE A   |              |                                       |     |           |
|--------------------------------------|--------------|---------------------------------------|-----|-----------|
| VPN LABEL                            | OUTGOING I/F | MAC                                   | VID | VPNi      |
| 26                                   | <i>EoS</i>   | MAC A                                 | 101 | COMPANY A |
| L2 VPN ROUTING TABLE OF ENTERPRISE A |              |                                       |     |           |
| L2                                   | MAC B        | LOOPBACK ADDRESS OF PE B; VIAN 152    |     |           |
| L2                                   | MAC C        | LOOPBACK ADDRESS OF PE C; VLAN 1501   |     |           |
| L2                                   | MAC A        | DIRECTLY CONNECTED, ETHERNET, VLAN101 |     |           |

## FIG. 11B

VPN TABLE OF ENTERPRISE A IN PE B

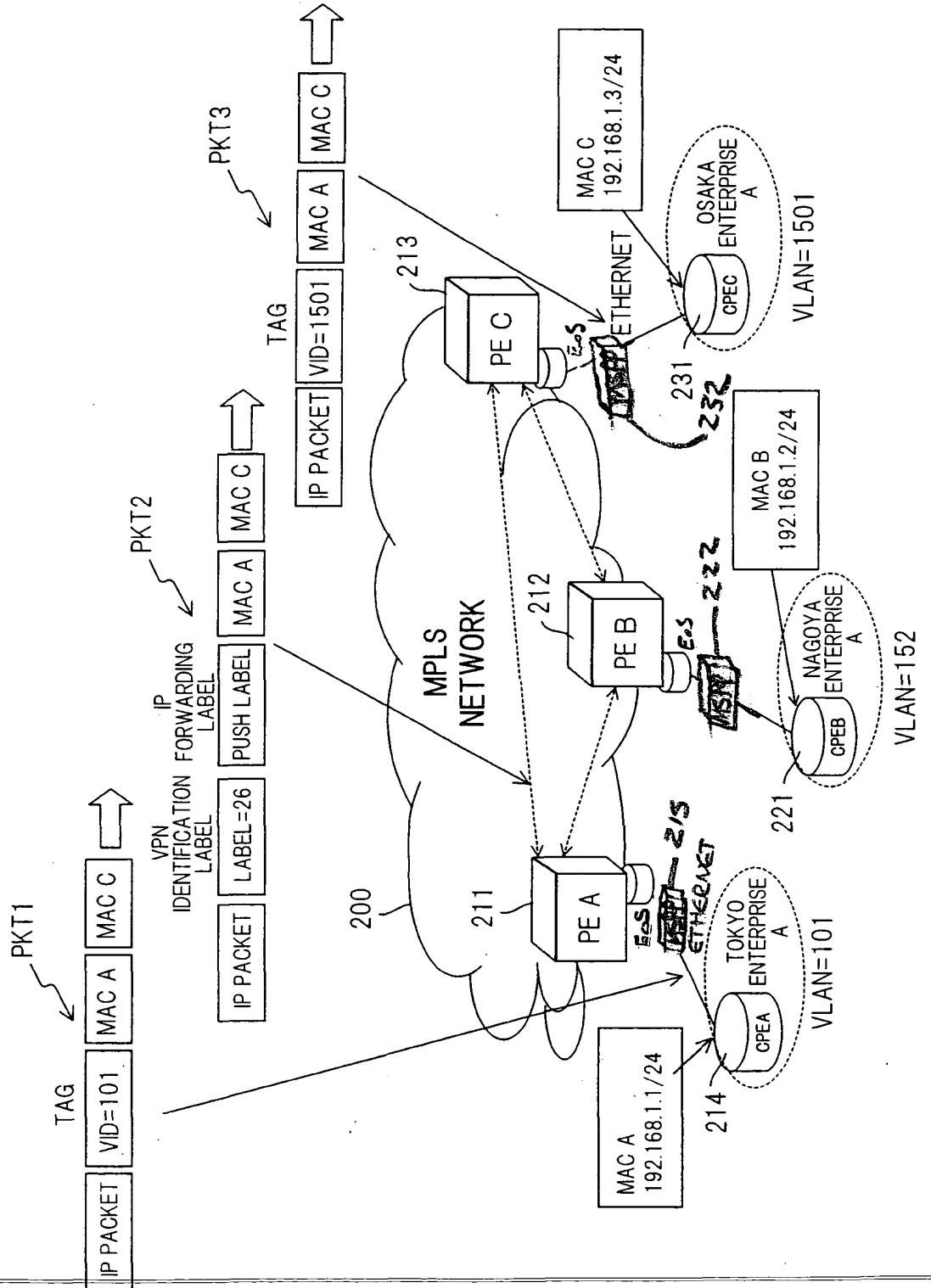
| L2 VPN LABEL TABLE OF ENTERPRISE A |              |  |     |           |
|------------------------------------|--------------|--|-----|-----------|
| VPN LABEL                          | OUTGOING I/F | MAC                                    | VID | VPNi      |
| 26                                 | <i>EoS</i>   | MAC B                                  | 152 | COMPANY A |
| L2 VPN TABLE OF ENTERPRISE A       |              |  |     |           |
| L2                                 | MAC B        | DIRECTLY CONNECTED, ETHERNET, VLAN 152 |     |           |
| L2                                 | MAC C        | LOOPBACK ADDRESS OF PE C; VLAN 1501    |     |           |
| L2                                 | MAC A        | LOOPBACK ADDRESS OF PE A; VLAN101      |     |           |

## FIG. 11C

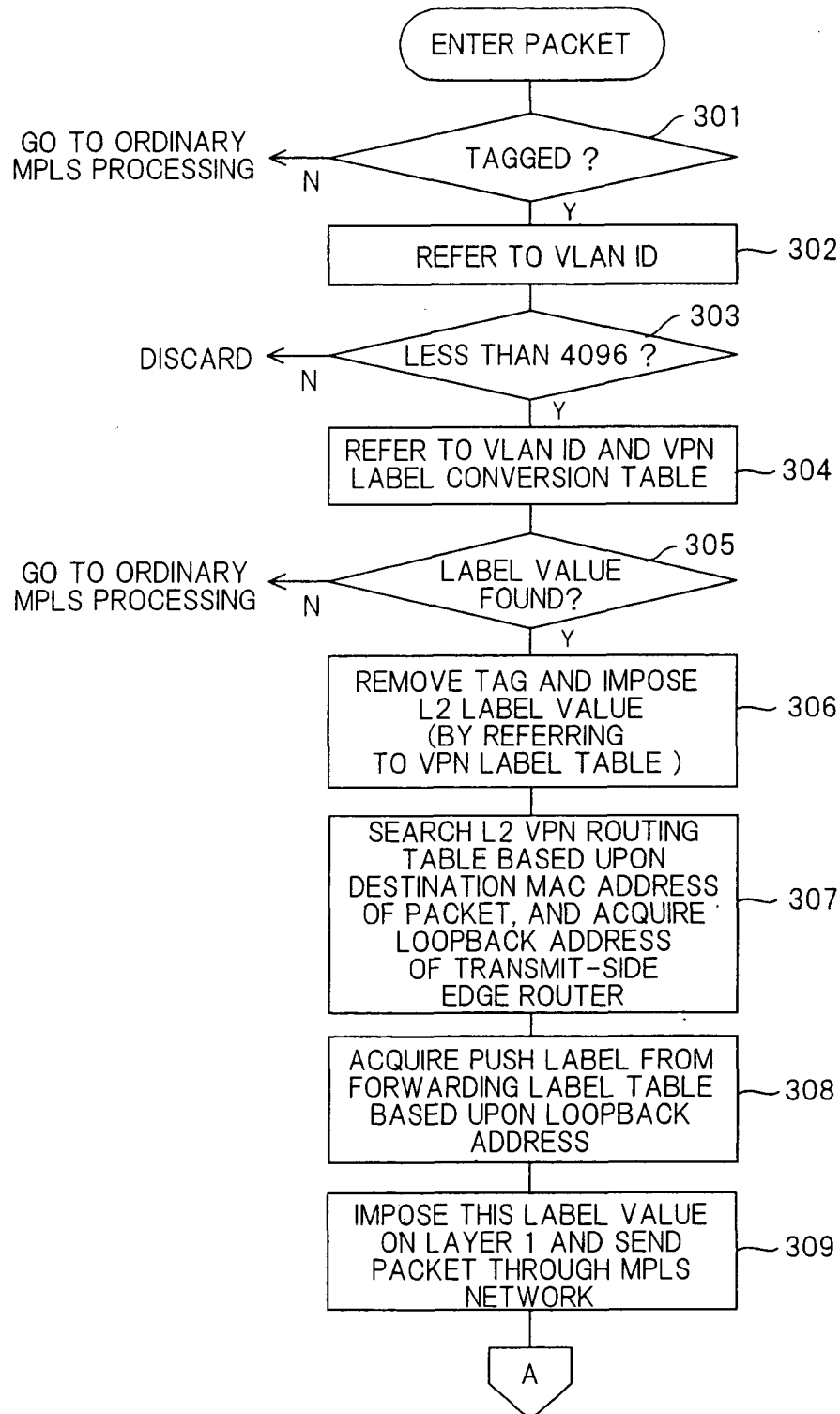
VPN TABLE OF ENTERPRISE A IN PE C

| L2 VPN LABEL TABLE OF ENTERPRISE A |              |  |      |           |
|------------------------------------|--------------|--|------|-----------|
| VPN LABEL                          | OUTGOING I/F | MAC                                    | VID  | VPNi      |
| 26                                 | <i>EoS</i>   | MAC C                                  | 1501 | COMPANY A |
| L2 VPN LABEL TABLE OF ENTERPRISE A |              |  |      |           |
| L2                                 | MAC B        | LOOPBACK ADDRESS OF PE B; VLAN152      |      |           |
| L2                                 | MAC C        | DIRECTLY CONNECTED, ETHERNET, VLAN1501 |      |           |
| L2                                 | MAC A        | LOOPBACK ADDRESS OF PE A; VLAN101      |      |           |

FIG. 12



**FIG. 13**



**FIG. 14**

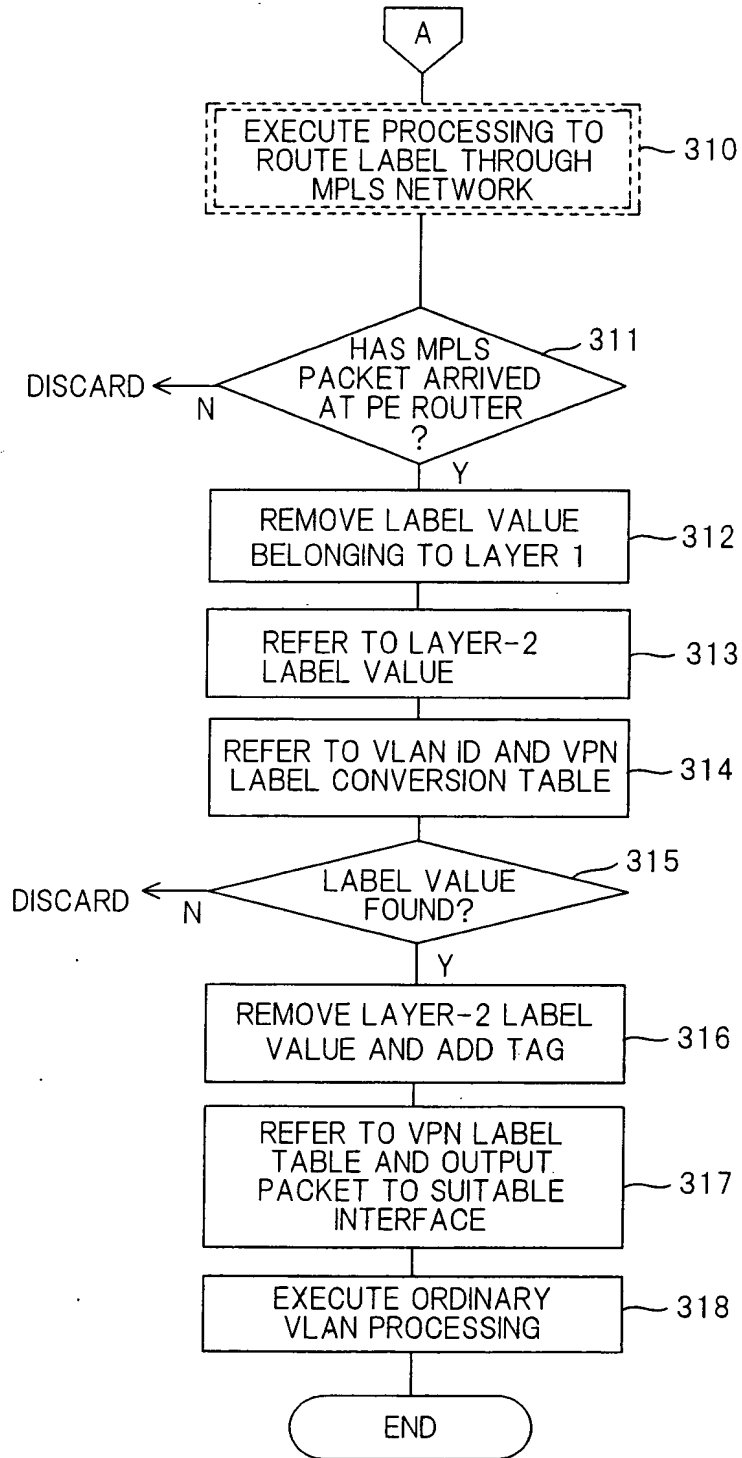


FIG. 15A

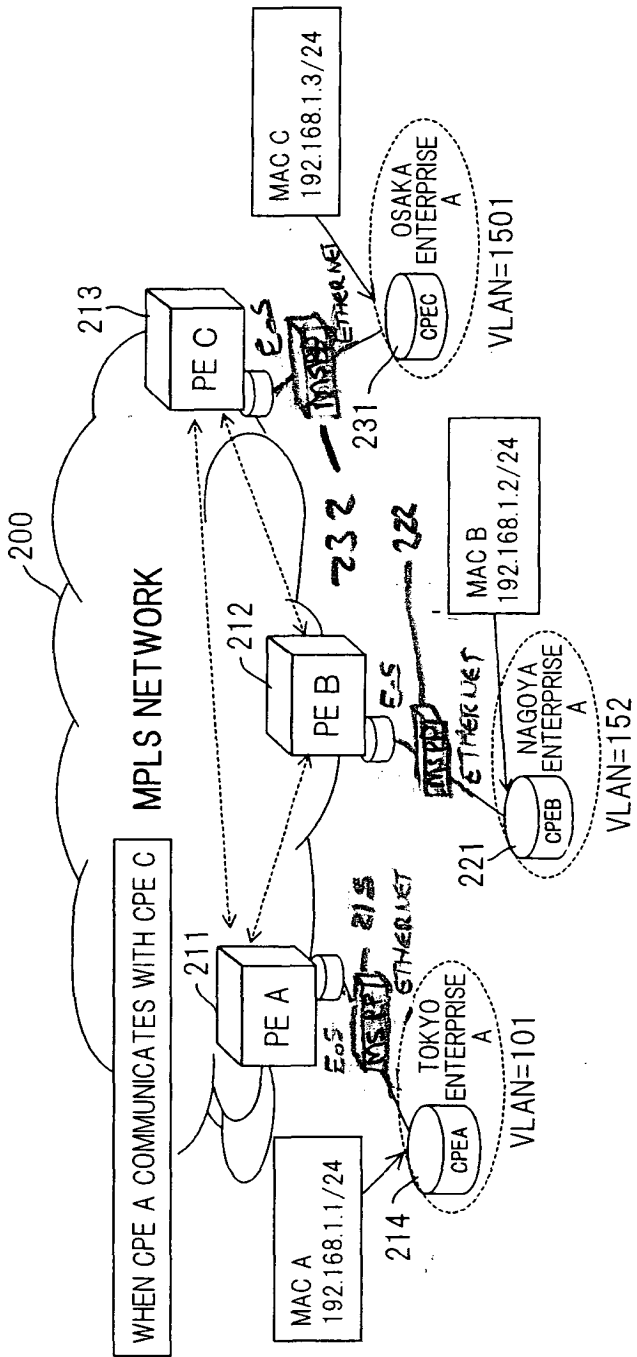


FIG. 15B

|    |  |
|----|--|
| 1. | BROADCAST ARP PACKET DIRECTED TO CPE C ( 192. 168. 1. 3) FROM CPE A  |
| 2. | IN CASE OF BROADCAST DIRECTED TO CPE C ( 192.168.1.3) FROM CPE A, CREATE COPY OF BROADCAST PACKET AT PE A AS NECESSARY AND SEND PACKET TO PE B , PE C                |
| 3. | SEND ARP-REPLY PACKET TO CPE A ( 192.168. 1. 1) FROM CPE C<br>AUTOMATICALLY LEARN OR ENTER MAC ADDRESS OF EACH CPE IN L2 VPN LABLE<br>TABLE, L2 VPN TABLE OF EACH PE |

**FIG. 16**

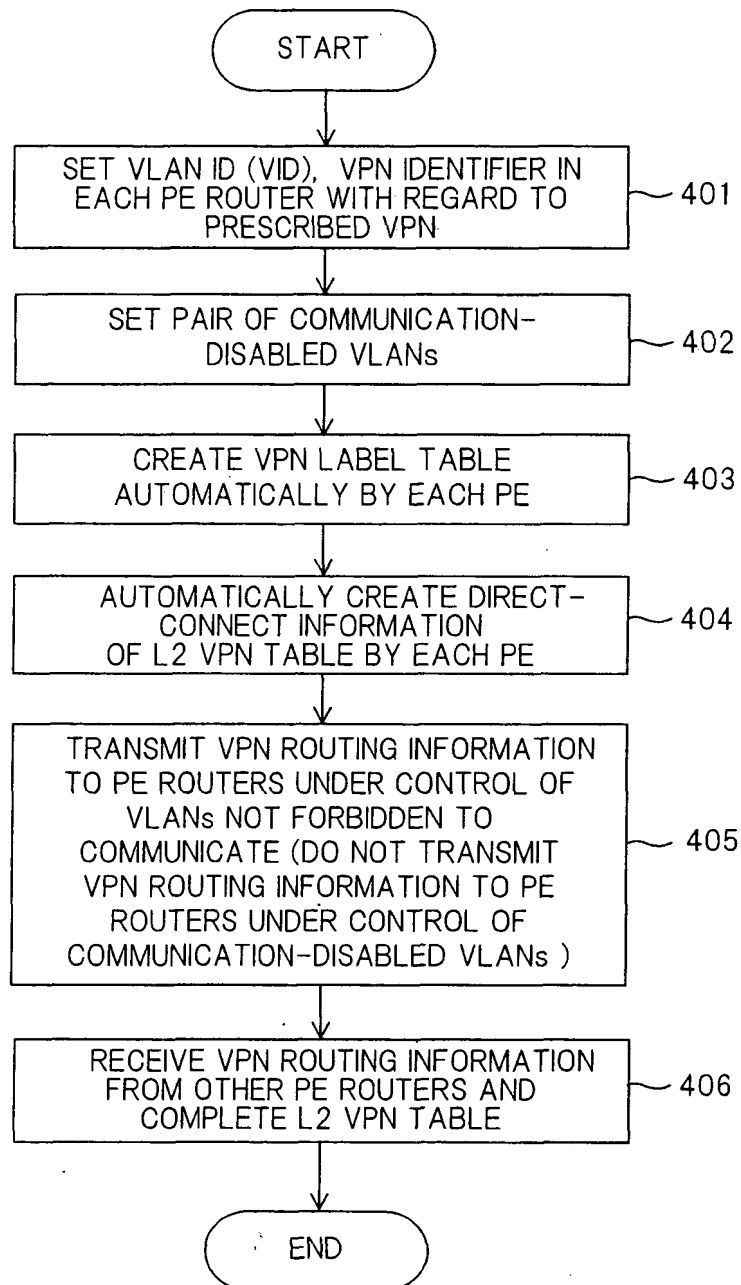




FIG. 17A

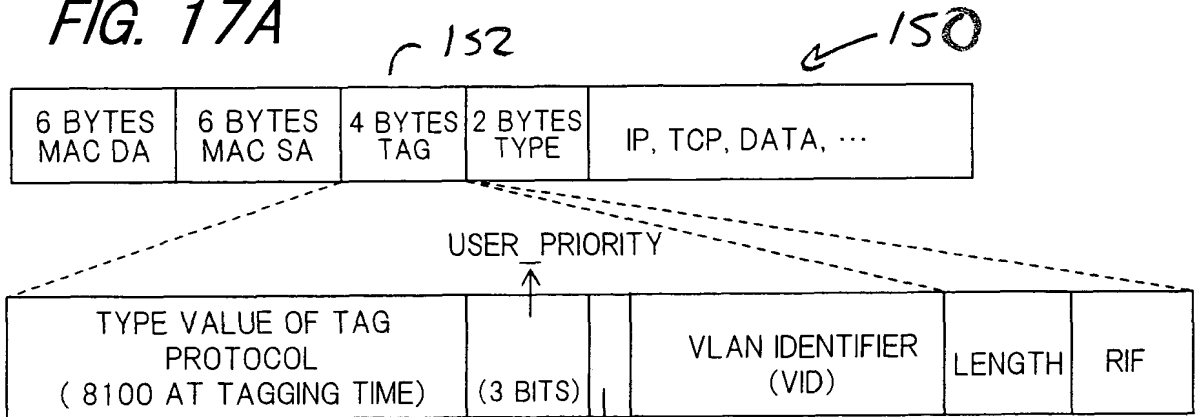
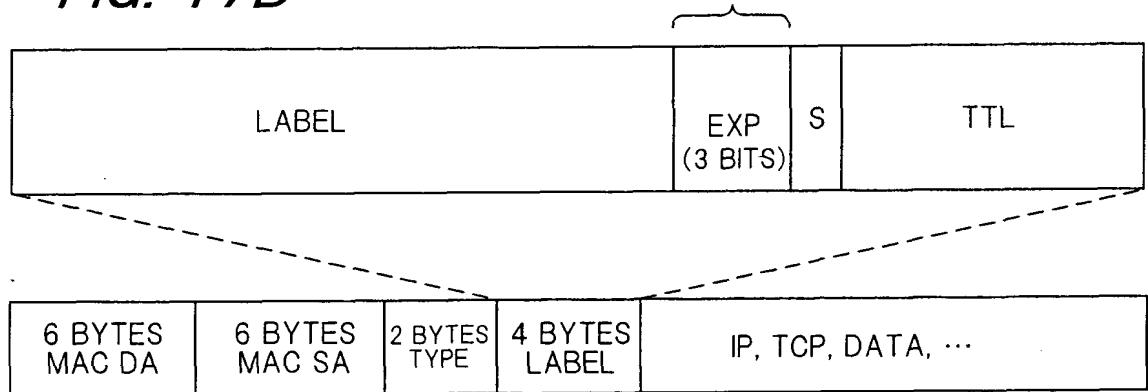


FIG. 17B



154